## IN THE CLAIMS

Please amend the claims as follows:


1. (original) A method of processing a domain expansion storage medium in which a magnetic wall is displaced in a readout layer to thereby enlarge a magnetic domain of a storage layer so as to reproduce an information indicated by said magnetic domain, said method comprising the steps of:

a) depositing said storage layer above a substrate of said storage medium;

b) passing at least one beam of ions through a mask with a predetermined pattern so as to project said predetermined pattern towards said storage layer; and

c) controlling said ion beam so as to alter the magnetic properties of said storage layer at regions below exposed portions in order to define magnetic domains of a data structure.


2. (original) A method according to claim 1, further comprising the step of depositing an additional protection or dielectric layer on said storage layer before performing said ion beam projection step.

3. (currently amended) A method according to claim 1 ~~or 2~~,
wherein the energy of ions of said ion beam is controlled in said
controlling step.


4. (currently amended) A method according to ~~any one of the~~
~~preceding claims~~claim 1, wherein said ion beam projection and
controlling steps are adapted to define a track structure in said
readout layer.


5. (original) A method according to claim 4, wherein said track
structure comprises magnetic and non-magnetic spiral or concentric
tracks.


6. (currently amended) A method according to ~~any one of the~~
~~preceding claims~~claim 1, wherein said beam projection and
controlling step are adapted to write embedded servo information or
spiral or concentric track structure into said storage layer.


7. (original) A method according to claim 1, wherein said
controlling step is adapted to control the focus of said at least
one ion beam so as to modify the magnetic properties of said
storage layer or said readout layer in order to define at least one
of data, servo and track patterns.

8. (original) A method according to claim 7, wherein a first focus is used for forming said data structure, while a second focus is used for forming said servo pattern or track patterns.

9. (currently amended) A method according to ~~any one of the preceding claims~~claim 1, wherein a whole disk is patterned in one or more exposure of said ion beam projection and processing steps.

10. (currently amended) A method according to ~~any one of the preceding claims~~claim 1, further comprising the step of forming said mask by an e-beam lithography and a subsequent semiconductor etching.

11. (original) A domain expansion storage medium in which a magnetic wall is displaced in a readout layer to thereby enlarge a magnetic domain of a storage layer so as to reproduce the information indicated by said magnetic domain, said storage medium comprising a storage layer processed by selective implantation of ions or atoms with a predetermined pattern to define at least one of a data pattern, a track pattern and a servo pattern.

12. (original) A storage medium according to claim 11, wherein a protection or dielectric layer is deposited on said storage layer of said storage medium.